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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,782	05/19/1999	SHIMON MULLER	0UN-P3987-JT	5640

22200 7590 12/04/2002

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EXAMINER

VANDERPUYE, KENNETH N

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/314,782

Applicant(s)

MULLER ET AL.

Examiner

Kenneth N Vanderpuye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28,29 and 34-37 is/are allowed.
- 6) ☒ Claim(s) 1,3,9-22,25-27,30,31,33 and 38 is/are rejected.
- 7) ☒ Claim(s) 4-8,23,24 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: .

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## **DETAILED ACTION**

### ***Claim Rejections - 35 U.S.C. § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 18, it is not clear what is meant by a signal indicating the beginning of a communication and a beginning of a portion of a communication and a first series of one or more elements... It is not clear the distinction between the beginning of a communication and beginning of a portion of a communication

### ***Claim Rejections - 35 U.S.C. § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 3, 9-10, 12, 14-17, 21-22, 26-27, 30-31, 33, 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Hui et al.(6,198,749).

With regards to claim 1, Hui teaches a method for transmitting a communication from a first network entity to a second network entity, wherein the first network entity and the second network entity are coupled to a communication medium, comprising:

receiving a communication from a process operating on a first network entity(Fig. 4@22), wherein the communication is directed to a second network entity(Fig. 4@68); distributing elements of said communication into multiple portions(col. 5 lines 46-49); sending a first portion of said communication on a first channel(Fig. 4@28) established on a first communication medium coupled to said first network entity(Fig. 4@22 and said second network entity(Fig. 4@68); and sending a second portion of said communication on a second channel(Fig. 4@29) established on a second communication medium coupled to said first network entity and second network entity.

Claim 16 is rejected in light of Fig. 4@68, Analog modems, 26 receive/collect the individual portions, the processor(IVMUX) processes the collected portions.

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With regards to claims 3, 17, 33 Hui teaches a method wherein said communication is an Ethernet frame and wherein each of said multiple portions of said communication comprises one or more bytes.(Fig. 4, Ethernet frames enter the inverse multiplexer and are split in two hence split into bytes).

With regards to claims 9-10, 21 Hui teaches a method in which said distributing comprises allotting elements of said communication among a plurality of channels established to convey a communication between said first network entity and said second network entity(Fig. 4@28, 29, two channels) using separate physical links.

With regards to claims 12 14-15, 27 the use of start and end symbols/codes also referred to as start and stop delimiters are inherently taught because frames have start and stop symbols so that they are distinguishable from other frames at the receiving side.

With regards to claim 22 is rejected because Hui teaches receiving at collection module(Fig. 4@68, 26) and combining said element of both communication portions(IVMUX).

With regards to claims 26, 38 Hui teaches a method comprising: receiving a communication frame(Ethernet frames) directed from a first network entity(Fig. 4@22 to a second network entity(Fig. 4@68, said frame comprising a plurality of bytes(Ethernet frame is made up of 1500 bytes); distributing said series of bytes to a plurality of coding modules, wherein each coding module receives and encodes a separate set of bytes from said series of bytes(Fig. 4@26, modems), framing each of said sets of bytes;(col 5 lines 49) and transmitting

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each of said sets of bytes across a separate channel coupling said first network entity to second network entity(separate channels used to transmit frames over PSTN).

Claim 30 is rejected on the same reasons as claim 16 because the recipient of the inverse multiplexed data is a computer as shown in Fig. 6-8

Claim 31 is rejected because what is claimed is performed by the modems.

***Claim Rejections - 35 U.S.C. § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 13, 20, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hui.(6,198,749)

With regards to claims 11, 20 Hui fails to teach the use of a common physical link, with first a second communication mediums. The use of common versus separate physical links is obvious as a matter of design choice.

With regards to claims 13, 25 Hui fails to teach the use idle signals/codes. The use of idle signals is well known in the art as a mechanism for maintaining synchronization between of a

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transmitter and receiver when there is not data to send. This is common in circuit switched networks. It would have been obvious to one of ordinary skill in the art to combine this well known art with Hui for the purpose of maintaining synchronization over a PSTN.

*Allowable Subject Matter*

7. Claims 28-29, 34-37, 39 are allowed.
8. Claims 2, 4-8, 23-24, 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Vanderpuye whose telephone number is (703) 308-7828. The examiner can normally be reached on M-F from 6:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms, can be reached on (703) -305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.



Kenneth Vanderpuye

November 30, 2002